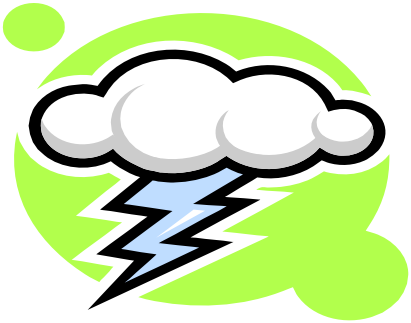

Safety First

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Lightning Precautions

Ah, those lazy, dog days of summer. It's time for those early morning day hikes, paddling trips and picnics at the springs. But summer is also the time for Florida's afternoon thunderstorms that bring spectacular lightning displays. Florida has more thunderstorms, and thus more lightning strikes, than any other state. Florida averages more than 10 deaths and 30 injuries per year from lightning. Over half of those deaths and injuries involve folks engaged in recreation and nearly 40 percent are water-related – boating, swimming, etc.

What causes lightning?

When water evaporates from the earth, this warm air rises into the atmosphere forming puffy cumulus clouds. Cooler air rushes in underneath, giving added impetus to the rise. If the upward push of warm air becomes powerful enough to reach 15-25 thousand feet then large, dense, tall towers of cumulonimbus clouds are formed. Updrafts and downdrafts within the clouds cause collision of particulates in the air creating a static electrical charge. The lighter, positively charge particles rise toward the top and the heavier, negative particles fall towards the bottom of the cloud. When the difference in the charges in the cloud or between the cloud and the ground become great enough, a giant "spark" occurs causing a flow of electrical energy (the leader stroke) to be released through the air. Once a connection is made (with the ground, for example) and the path is complete, a surge of electrical current moves in the opposite direction back to the cloud (the main stroke) and produces a flash of light - lightning. This heats the air causing it to expand rapidly resulting in an explosion - thunder.

Did you know you have a built-in lightning detection device?

Yep, you've got a first-class device built into your head as standard equipment. By referencing the time in seconds from seeing the lightning (the FLASH) to hearing the accompanying thunder (the BANG), you can get a pretty good idea of lightning's distance from you.

1. Flash to Bang = 5 seconds = lightning distance of 1 mile away
2. Flash to Bang = 10 = 2 miles
3. Flash to Bang = 20 = 4 miles

Flash to Bang = 30 = 6 miles; etc.
A similar rule of thumb is the "30-30 Rule." When you see lightning, count the time until you hear thunder. If this time is 30 seconds or less, seek shelter. If you can't see the lightning, just hearing the thunder is a good back-up rule.

So what can you do to prevent becoming a crispy critter from a lightning strike?

Be prepared. Especially in the Florida summer, check local weather reports frequently and keep an eye on the sky for developing storms.

- Plan your outdoor activities for the morning – 70% of thunderstorms occur between noon and 6 pm.
- Avoid water, metallic objects, high ground, open areas, solitary trees, unprotected open buildings like picnic pavilions, and close contact with other people.
- The best shelter is a fully enclosed building, e.g. your typical house. Substantially constructed means it has wiring and plumbing in the walls.
- If you can't get to a building, look for a vehicle with a solid metal roof and metal sides.
- Avoid contact with conducting paths going outside: close the windows, lean away from the door, and put your hands in your lap. Convertibles, cars with fiberglass or plastic shells, and open framed vehicles don't count.
- If no building or vehicle is available, seek clumps of shrubs or trees of uniform height.
- As a last resort, spread out (if you are in a group), put your feet together, squat down, tuck your head, and cover your ears. When the immediate threat has passed, continue heading to the safest spot possible.

If someone in your group is struck by lightning:

- Call 911
- Check heart beat and breathing - administer CPR or mouth-to-mouth resuscitation, as needed.

If you and the victim are in danger of another strike, move to a safer location.

Treat lightning like a snake: if you see it or hear it, take evasive measures!